

ROYAL CIVIL SERVICE COMMISSION

CIVIL SERVICE COMMON EXAMINATION (CSCE)2008

EXAMINATION CATEGORY:TECHNICAL

PAPER III :SUBJECT SPECIALIZATION PAPER FOR MEDICINE

Date : 20/12/08

Total Marks : 100

Examination Time: 2.5hours

Reading Time : 15 minutes

This question paper consists of 7(seven) pages and two sections:Section **A** and **B**.

Section A consists of 30 Multiple choice questions carrying 1(one) mark each and then four short questions each carrying 5(five) marks .Candidates will have to answer **all** the MCQs and all the four short questions. **Section B** consists of 2(two) case studies and the candidates will have to attempt **any one** of the two case studies. **(50 Marks)**

All the answers should be written on the answer sheet provided.

Section A: Multiple Choice Questions

Choose the most correct / appropriate answer and write against the question number(Example:Q1-d, Q2-c)

- 1) The following structures are related to the left kidney EXCEPT:
 - a) Colon
 - b) Pancreas
 - c) Duodenum
 - d) Left suprarenal gland

- 2) The following are the branches of the External Carotid Artery EXCEPT:
 - a) Thyrocervical trunk
 - b) Facial artery
 - c) Lingual artery
 - d) Maxillary artery

- 3) The following muscles are supplied by the obturator nerve EXCEPT:
 - a) Adductor longus
 - b) Adductor magnus
 - c) Gracilis
 - d) Soleus

- 4) The amount of blood pumped out by each ventricle per beat is:
 - a) Cardiac output
 - b) Stroke volume
 - c) Residual Volume
 - d) Ejection Fraction

- 5) Regarding gastrointestinal fluid which of the following sentences is true:
- a) Gut secretions amount to approximately 7 litres per day
 - b) Most fluid reabsorption occurs in the colon
 - c) Gastrointestinal fluid loss is generally hypertonic
 - d) Volume replacement with 5% dextrose is required for gut fluid loss
- 6) Tidal Volume is:
- a) 500 ml
 - b) 1500 ml
 - c) 3000 ml
 - d) 150 ml
- 7) Regarding Anaphylaxis which of the following sentences is false:
- a) develops 24 hours after the initial stimulus
 - b) Causes a weal and flare response
 - c) Causes eosinophilia
 - d) Causes degranulation of basophils and mast cells
- 8) Hypertrophy is associated with:
- a) An increase in the number of visible mitoses
 - b) An increase in the bulk of a tissue
 - c) An increase in the number of cells in an organ or tissue
 - d) An absolute decrease in interstitial tissue
- 9) The following are malignancies of epithelial origin EXCEPT:
- a) Squamous cell carcinoma
 - b) Renal cell cancer
 - c) Sarcoma
 - d) Adenocarcinoma
- 10) Which one amongst the following is a fluoroquinolone?
- a) Ceftriaxone
 - b) Penicillin
 - c) Cefazolin
 - d) Ciprofloxacin
- 11) The drug absorption following oral administration:
- a) Occurs most commonly through passive diffusion
 - b) Occurs predominantly in the colon
 - c) is usually complete in 60 minutes
 - d) Is not related to meals.

- 12) The following drugs must be avoided in renal failure:
- a) Prednisolone
 - b) Amoxicillin
 - c) Gentamycin
 - d) Frusemide
- 13) The Mc Burney's point:
- a) Lies in the midpoint between the umbilicus and the xiphoid process
 - b) Is situated at the lateral 1/3rd and medial 2/3 rd of the right spinoumbilical line
 - c) Is situated at the lateral 2/3rd and the medial 1/3rd of the right spinoumbilical line
 - d) Lies in the midpoint of the right spinoumbilical line
- 14) The following are the features of Gastric Outlet Obstruction EXCEPT:
- a) Dehydration
 - b) Hypokalaemia
 - c) Hypertension
 - d) Aciduria
- 15) Which is the non-absorbable suture?
- a) Catgut
 - b) Vicryl
 - c) Prolene
 - d) Daxon
- 16) The healing of a wound is delayed by:
- a) Vitamin C
 - b) Adequate blood supply
 - c) Starvation
 - d) None of the above
- 17) The following tests should be performed on donor blood before it is used for transfusion:
- a) HBsAg
 - b) VDRL tests
 - c) Van den Bergh
 - d) Malaria smear
- 18) The following are carcinogenic EXCEPT:
- a) Ultra-violet radiation
 - b) House dust
 - c) Soot
 - d) Mould

- 19) Green Stick Fracture is;
- Fracture with multiple bone fragments
 - Fracture resulting from diseased bone
 - Fracture in the elderly lady
 - Most common in the children
- 20) Regarding Osmolality all are true EXCEPT:
- Refers to the number of moles of substance per unit volume of water
 - When compared with plasma is referred to as tonicity
 - Plasma osmolality may be calculated approximately by knowledge of the concentrations of the sodium, glucose and urea concentrations.
 - The plasma osmolality depends mostly upon the concentration of sodium ions
- 21) Regarding Cushing's syndrome all are true except:
- Maybe iatrogenic
 - Maybe of pituitary origin
 - Is often of hypothalamic origin
 - Maybe due to pituitary pathology
- 22) A tumour maybe defined as:
- An abnormal mass of tissue
 - A growth of tissue which is coordinated with that of the rest of the body
 - An abnormal increase in the cells of a tissue
 - A malformation in which the various tissues of the part are present in improper proportions or distributions
- 23) Obstruction of the common bile duct is associated with the following biochemical abnormalities:
- A greater increase in the serum concentration of bilirubin diglucuronide than bilirubin monoglucuronide
 - An increase in the serum concentration of unconjugated bilirubin
 - An increase in faecal fat
 - An increase in urinary urobilinogen
- 24) Signs of cerebellar disease include all EXCEPT:
- Dysmetria
 - Resting Tremor
 - Incoordination
 - Dysdiadochokinesia

- 25) Haemolytic jaundice is associated with:
- a) An increase in the concentration of bilirubin diglucuronide in the bile
 - b) The presence of bilirubin in the urine
 - c) An increase in the serum alkaline phosphatase
 - d) A decrease in unconjugated bilirubin in the serum
- 26) Transection of the spinal cord at C6 level will produce all EXCEPT:
- a) Immediate spastic paralysis of the trunk and extremities
 - b) Diaphragmatic breathing only
 - c) Urinary retention
 - d) Ileus
- 27) Regarding the Haemolytic Disease of the newborn which sentence is not true?
- a) Caused by treponema pallidum
 - b) May occur in the first pregnancy
 - c) Frequently is not found until the second pregnancy
 - d) Can be treated with anti-D antibodies
- 28) Recently there was an outbreak of Rabies in:
- a) Gelephu
 - b) Gasa
 - c) Samtse
 - d) Tsirang
- 29) Stored blood has the following characteristics EXCEPT:
- a) CPD-A preservative provides a shelf life of upto 35 days
 - b) One unit comprises of 500ml of whole blood and a small amount of preservative
 - c) The oxygen affinity of haemoglobin increases
 - d) Significant depletion of factors V, VIII and X
- 30) Regarding the Hepatitis B virus which statement is not true?
- a) Is transmitted by the oral route
 - b) is common in renal dialysis units
 - c) Is the cause of Burkitt's lymphoma
 - d) Causes immune complex disease

Short answer questions:

Answer all the questions.

(5marks each)

1. Write on the future of health care services in Bhutan.
2. Short notes on any of the two from the following:
 - a) SARS
 - b) HIV
 - C) Hepatitis B
 - d) Cholera
- 3) Write the Immunization schedule (EPI) for children in Bhutan.
- 4) Write short note on Rabies.

Section B: Case Studies

Given below are two case studies .Read the cases carefully and answer the questions given after each case. You need to attempt only one case study.

Case 1.

A bus carrying 40 passengers went off the road and fell about 100 metres below the road .There were multiple casualties with varying degrees of severity.You as a young energetic doctor is leading a rescue team to the accident site with all the necessary first aid equipment:

- a) As a team leader how would you like to manage the scene.
- B) One passenger has a crush injury to his right leg and is in shock .How will you manage this case.
- c) One of the victims is having acute respiratory distress, cyanosed, shock with features of chest trauma. How will you manage this case.
- d) One of the pasenger has severe bruising over his left lower chest .He has pain abdomen with tachycardia and blood pressure is 90/60mmHg.What injuries could he have sustained. Outline the management plan.
- e) One passenger has a severe head injury.
Classify head injury and outline the management plan of head injury.

Case 2.

A 60 year old man was brought to the casualty with the following conditions:

Respiratory rate 50/min.

Pulse rate of 150/min.

BP of 80/40.

- a) Please assess and **outline** the initial management plan.

- b) The man's daughter tells you that her father was not taking his medicines (glibenclamide) regularly and that he was sick for the past one week.
What is your diagnosis?
Give the immediate management plan.

- c) In a different situation from the one described above, say an elderly woman presented with severe dyspnea, wheezing with rhonchi in both the chest and is cyanosed. She is normotensive and has a temperature of 103 degree F. Give a brief outline of the management of her problem.

- d) Say both your patients got better and you have decided to discharge them.
What advice are you going to give to the patients and their family members regarding the above two problems.

- e) The daughter of your first patient is a 35 years old lady and weighs 220 lbs. She shows you her ultrasound scan report which says she has multiple gall stones and fatty liver. She never had any history of pain abdomen. What advice would you give to this lady other than asking her to consult a surgeon for her gall stones?
She is asking you for a general checkup. What are the tests and advises will you offer her?